

INTERNATIONAL SEARCH REPORT

International Application No

PCT/NL 03/00929

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61K39/00 C07K14/00 C07K14/025

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07K A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 02/12281 A (HUNG CHIEN FU ; WU TZYU CHOU (US); UNIV JOHNS HOPKINS (US)) 14 February 2002 (2002-02-14)	10, 11, 16, 18-22
Y	page 28; sequence 5	1-7, 9-13, 15-22
X	WO 00/75336 A (GUILLET JEAN GERARD ; INST NAT. SANTE RECH MED (FR); CONNAN FRANCINE (F) 14 December 2000 (2000-12-14)	10, 11, 16, 18-22
Y	sequence 12	1-7, 9-13, 15-22
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *Z* document member of the same patent family

Date of the actual completion of the international search

28 July 2004

Date of mailing of the international search report

03.01.05

Name and mailing address of the ISA

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/NL 03/00929

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	TAM J P ET AL: "Tandem peptide ligation for synthetic and natural biologicals" September 2001 (2001-09), BIOLOGICALS, VOL. 29, NR. 3-4, PAGE(S) 189-196 , XP002290180 ISSN: 1045-1056 the whole document	1-7, 9-13, 15-22
X	KELL BARBARA ET AL: "Detection of E5 oncoprotein in human papillomavirus type 16-positive cervical scrapes using antibodies raised to synthetic peptides" JOURNAL OF GENERAL VIROLOGY, vol. 75, no. 9, 1994, pages 2451-2456, XP009034550 ISSN: 0022-1317 the whole document	10
A	NARDIN E H ET AL: "A totally synthetic polyoxime malaria vaccine containing Plasmodium falciparum B cell and universal T cell epitopes elicits immune responses in volunteers of diverse HLA types." JOURNAL OF IMMUNOLOGY (BALTIMORE, MD. : 1950) 1 JAN 2001, vol. 166, no. 1, 1 January 2001 (2001-01-01), pages 481-489, XP002290179 ISSN: 0022-1767 the whole document	8,14
A	WO 90/13564 A (CONNAUGHT LAB) 15 November 1990 (1990-11-15) the whole document	1-22

INTERNATIONAL SEARCH REPORT

International application No.
PCT/NL 03/00929

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
1-22 (partially)

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

Invention 1: Claims 1-22 (partially)

A method of producing a synthetic protein comprising an amino acid sequence that is at least 80% identical to at least 46 contiguous amino acids of a naturally occurring antigenic protein of a pathogen or tumor, comprising the steps of synthesizing two or more fragments and ligating the fragments,
wherein the synthetic protein is at least 80% identical to 46 contiguous amino acids of SEQ ID NO.1

Inventions 2-6: Claims 1-22 (partially)

As Invention 1, with SEQ ID NOs. 2-6, respectively.

INTERNATIONAL SEARCH REPORT

International Application No
PCT/NL 03/00929

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
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			EP 1363938 A2	26-11-2003
			JP 2004527213 T	09-09-2004
			WO 0212281 A2	14-02-2002
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			EP 0470980 A1	19-02-1992
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			JP 4502013 T	09-04-1992
			US 5817318 A	06-10-1998